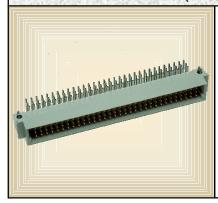
THROUGH-HOLE SOLDERING SOLDERLESS (PRESS-FIT) CONNECTORS

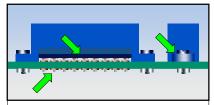


SOLDERLESS (PRESS-FIT) CONNECTORS

The use of high-density, high pin-count connectors (i.e.: backplane connectors, PC104, etc.) in multi-layer boards presents a technical challenge to the designer. The close pin geometries and thermal mass make reliable soldering extremely difficult.

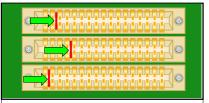
Press-fit technology offers a "solderless" alternative, with spring-pin terminations that produce a reliable electrical termination with a gas-tight, mechanical fit to the plated-through hole.

Press-fit technology shall not be specified for flight applications without prior NASA approval.



PREFERRED GENERAL REQUIREMENTS

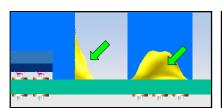
The connector has been properly installed, parallel to, and in full contact with the mounting surface. Pins are fully inserted, even, and meet minimum protrusion requirements. Mounting features (i.e.: board lock tabs or fasteners) have been fully inserted and set.



PREFERRED KEYING

Connectors should be keyed to prevent incorrect mating / interchanging with similar sized / colored connectors.

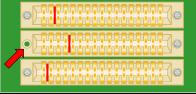
Best Workmanship Practice



ACCEPTABLE ALTERNATIVE MECHANICAL MOUNTING

Connectors not supplied with a locking tab or fastener system shall be secured with staking compound. Staking compound shall not be applied over conductive surfaces.

Best Workmanship Practice



UNACCEPTABLE MISSING MOUNTING / CONNECTING HARDWARE

Missing mounting / connecting hardware can interfere with the proper mating of the connector.

Best Workmanship Practice

NASA WORKMANSHIP STANDARDS



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

JOHNSON SPACE CENTER HOUSTON, TEXAS USA 77058

Released: 06.27.2002	Revision:	Revision Date:	
Book: 6	Section: 6.08	Page:	

THROUGH-HOLE SOLDERING SOLDERLESS (PRESS-FIT) CONNECTORS (cont.)



UNACCEPTABLE SOLDERED TERMINATIONS

Solderless terminations are specifically designed for termination in plated-through holes (PTH) without soldering. The special design will prohibit the formation of a properly wetted solder interface between the pin and the PTH wall.

Best Workmanship Practice

NASA WORKMANSHIP STANDARDS



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

JOHNSON SPACE CENTER HOUSTON, TEXAS USA 77058

Released: 06.27.2002	Revision:	Revision Date:
Book:	Section:	Page: